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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/158,549	09/22/1998	JOHN S. HENDRICKS	5515	4086
56015 7590 04/06/2007 PATTERSON & SHERIDAN, LLP/ SEDNA PATENT SERVICES, LLC 595 SHREWSBURY AVENUE SUITE 100 SHREWSBURY, NJ 07702			EXAMINER BROWN, RUEBEN M	
			ART UNIT 2623	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 09/158,549	Applicant(s) HENDRICKS ET AL.	
	Examiner Reuben M. Brown	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6,16,17,19-21 and 43-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,16,17,19-21 and 43-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION


1. In view of the Appeal Brief filed on 11/20/06, PROSECUTION IS HEREBY REOPENED. As set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:


SCOTT E. BELIVEAU
PRIMARY PATENT EXAMINER
Acting SPE

Response to Arguments

2. Applicant's arguments filed in the Appeal Brief have been fully considered but they are moot in view of the new grounds of rejection. The 112 1st paragraph rejection against the 07/991,704 has been dropped. A new 112 1st paragraph rejection against the current application is applied in the present Office Action. Because the present Office Action is the first time that the 112 1st paragraph rejection has been applied to the current application, the finality of the earlier Office Action has been withdrawn, and a new non-final Rejection has been entered herein.

Examiner does not find evidence that the specification explicitly disclosed that the processing of the electronic mail as recited in the claims is supported in the specification.

3. In response to applicant's arguments against the references individually, (regarding the 103 rejection) one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The main argument presented on pages 13-14 of the Brief was that Handelman was not properly prior art, since the parent application, 07/991,704 disclosed the relevant subject matter, and therefore the combination of Kauffman & Lett does not meet the claims.

However, the effective filing date of this feature is not 12/9/1992 as asserted in the Appeal Brief. Examiner sets forth below, again, the analysis as to whether the 07/991,704 application disclosed the claimed subject matter. It is also pointed that 112 rejections against the current applications with respect to the claimed subject matter has been entered.

In particular, applicant's response does not point to any specific citation in the 07/991,074 application that specifically discloses that the Level B upgrade on the set top terminal actually processes electronic mail. Instead applicant points to the disclosure that the Level B upgrade supports AOL and Prodigy, and various other online services, namely, airline reservations, hotel reservations, encyclopedia, shopping center, games, etc. However, the Fig. 53a discussed by applicant does not explicitly disclose that electronic mail was one of the interactive services supported by the upgrade.

It is argued that the parent application recited interactive features such as electronic mail described with the interactive services level B menu and the set top terminal hardware upgrade level B interactive unit, (page 25, line 19 thru page 26, lines 1-7). However, as pointed out before, the disclosed passage merely stated that electronic mail is provided by the network controller 214 to the set top terminal. The specification never discloses that electronic mail is processed by the hardware upgrade level B interactive unit.

Even though the STT of the present invention generally accesses AOL and/or Prodigy, there is no requirement that the STT is inherently enabled to process all of the services available.

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Applicant responds, 'do not know why the examiner has the opinion that some services are not supported'. However, examiner's position is that applicant disclosure does not explicitly demonstrate that the hardware Level B upgrade unit supported the specific interactive service of electronic mail.

Furthermore, even if the disclosure of AOL & Prodigy inherently enables the Level B upgrade to support electronic mail, the specific recitation of; 'at least one microprocessor connected to the said interface for processing the electronic mail to produce processed electronic mail'. There is no drawing or citation in the specification that explicitly discloses that the hardware Level B upgrade processes electronic mail to produce processed electronic mail.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-2, 4-6, 16, 17, 19-21 & 43-45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had

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possession of the claimed invention. The instant claims 1, 16 & 45, recite, "A hardware upgrade for enhancing the functionality of a set top terminal... the hardware upgrade comprising... an interface... whereby digital data, including the electronic mail is transferred from the set top terminal for processing and the processed electronic mail is passed to the set to terminal for display" and "the hardware upgrade comprising, ...processing the electronic mail to produce processed electronic mail", examiner does not find explicit written description in the specification filed in the present application, 09/158,549, which is a Divisional of application 08/160,194, filed 12//02/1993 to support the claimed subject matter.

The following are the portions of the present application that discuss the Level B upgrade, or electronic mail. It is pointed out that page 32, lines 27-32 of specification (which incidentally corresponds with page 26, 3rd paragraph of the 07/991,704 application), merely teaches that the network controller 214 acts a central computer and provides electronic mail service to the set top terminal, Furthermore, page 33, lines 2-4 of the present application, discloses, "These interactive features are further described below with the interactive services level B menu and the set top terminal hardware upgrade level B interactive unit". First of all, it is pointed out that the specification does not explicitly mention electronic mail services anywhere else other than as cited on page 32. Thus, the "described below", phrase does not explicitly pertain to "electronic mail". Secondly, even if the phrase of page 33, lines 2-4 could be construed to read that the "interactive features", including electronic mail are accessed using the interactive service level B menu and because of the upgrade level B interactive unit, that written description

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still does not explicitly state that the upgrade level B interactive unit receives and processes the electronic mail and passes the instant electronic mail back to the set top terminal for display.

Page 37, lines 27-30 discloses, “In this way, subscriber inputs, entered through the set top terminal keypad or remote control, can be transferred to any of the hardware upgrades for processing and responses generated therein can be sent back to the set top terminal for display”. However, the specification has not explicitly stated that electronic mail is one of the instant ‘subscriber inputs’.

It is pointed that applicant has cited pages 38, lines 18-22 as supporting the claimed subject matter, since that portion discusses that the upgrade level B interactive unit “provides access to online data base services such as home shopping, airline reservations, news, financial services, classified advertising, home banking and interactive teletext services”. However, examiner points out that the instant disclosure still does not explicitly state electronic mail is received and processed by the upgrade level B interactive unit.

Moreover, page 41, lines 7-11 discloses, “In addition, the interface may be a “mailbox”, which resides in the set top terminal 220 as a single memory location. This embodiment facilitates the transfer of data between the set top terminal 220 and the expansion card in either serial or parallel format”. However, this disclosure while discussing a “mailbox”, still does not support the presently constructed claim language. In particular, the disclosure only specifically mentions that the “mailbox” resides on the set top terminal 220, and does not explicitly mention

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any “mailbox” that resides on the expansion card. Secondly, the instant disclosure merely teaches that the “embodiment facilitates the transfer of data”, but does not explicitly disclose that e-mail data is transferred to the expansion card. It is noted that e-mail data has achieved a specific meaning (for instance by use of the SNMP protocol) in the art of telecommunications, and is more narrow than the broader term, “data”.

Examiner furthermore notes that as of the amendment filed 8/21/2004, claim 1 of the present application, recited, ‘A hardware upgrade for enhancing the functionality of a set top converter in a TV program delivery system, each set top converter having a mailbox adapted to receive electronic mail’, emphasis added. This claimed feature appears to correspond with the disclosure of page 41, lines 7-9 of the present application. However, the amendment filed 4/13/2005 deleted the feature ‘each set top converter having a mailbox’.

6. Claims 1-2, 4-6, 16, 17, 19-21 & 43-45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In particular, in claims 1, 16 & 45, the following subject matter is not enabled by the specification; “A hardware upgrade for enhancing the functionality of a set top terminal... the hardware

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upgrade comprising... an interface... whereby digital data, including the electronic mail is transferred from the set top terminal for processing and the processed electronic mail is passed to the set to terminal for display” and “the hardware upgrade comprising, ...processing the electronic mail to produce processed electronic mail” to support the claimed subject matter.

The following are the portions of the present application that discuss the Level B upgrade, or electronic mail. It is pointed out that page 32, lines 27-32 of specification (which incidentally corresponds with page 26, 3rd paragraph of the 07/991,704 application), merely teaches that the network controller 214 acts a central computer and provides electronic mail service to the set top terminal, Furthermore, page 33, lines 2-4 of the present application, discloses, “These interactive features are further described below with the interactive services level B menu and the set top terminal hardware upgrade level B interactive unit”. First of all, it is pointed out that the specification does not explicitly mention electronic mail services anywhere else other than as cited on page 32. Thus, the “described below”, phrase does not explicitly pertain to “electronic mail”. Secondly, even if the phrase of page 33, lines 2-4 could be construed to read that the “interactive features”, including electronic mail are accessed using the interactive service level B menu and because of the upgrade level B interactive unit, that written description still does not explicitly state that the upgrade level B interactive unit receives and processes the electronic mail and passes the instant electronic mail back to the set top terminal for display.

Page 37, lines 27-30 discloses, “In this way, subscriber inputs, entered through the set top terminal keypad or remote control, can be transferred to any of the hardware upgrades for

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processing and responses generated therein can be sent back to the set top terminal for display”.

However, the specification has not explicitly stated that electronic mail is one of the instant ‘subscriber inputs’.

It is pointed that applicant has cited pages 38, lines 18-22 as supporting the claimed subject matter, since that portion discusses that the upgrade level B interactive unit “provides access to online data base services such as home shopping, airline reservations, news, financial services, classified advertising, home banking and interactive teletext services”. However, examiner points out that the instant disclosure still does not explicitly state electronic mail is received and processed by the upgrade level B interactive unit.

Moreover, page 41, lines 7-11 discloses, “In addition, the interface may be a “mailbox”, which resides in the set top terminal 220 as a single memory location. This embodiment facilitates the transfer of data between the set top terminal 220 and the expansion card in either serial or parallel format”. However, this disclosure while discussing a “mailbox”, still does not support the presently constructed claim language. In particular, the disclosure only specifically mentions that the “mailbox” resides on the set top terminal 220, and does not explicitly mention any “mailbox’ that resides on the expansion card. Secondly, the instant disclosure merely teaches that the “embodiment facilitates the transfer of data”, but does not explicitly discloses that e-mail data is transferred to the expansion card. It is noted that e-mail data has achieved a specific meaning (for instance by use of the SNMP protocol) in the art of telecommunications, and is more narrow than the broader term, “data”.

Examiner furthermore notes that as of the amendment filed 8/21/2004, claim 1 of the present application, recited, 'A hardware upgrade for enhancing the functionality of a set top converter in a TV program delivery system, each set top converter having a mailbox adapted to receive electronic mail', emphasis added. This claimed feature appears to correspond with the disclosure of page 41, lines 7-9 of the present application. However, the amendment filed 4/13/2005 deleted the feature 'each set top converter having a mailbox'.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-2, 4-6, 16-17, 19-21 & 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kauffman, (U.S. Pat # 5,003,591), in view of Handelman, (U.S. Pat # 5,715,315) & Lett, (U.S. Pat # 5,657,414).

Considering claim 1, regarding the amended claimed hardware upgrade for enhancing the functionality of a set top terminal, (STT) in a TV delivery system, such that each STT is adapted to receive electronic mail, Kauffman discloses an interactive two-way CATV system that enables a subscriber to transmit/receive e-mail services at a set top converter 40, i.e. STT, see Kauffman Fig. 1 & col. 8, lines 19-32. Moreover, the converter 40 of Kauffman includes a microprocessor 50, which reads on the claimed microprocessor; see Fig. 2 & col. 6, lines 35-60.

As for the hardware upgrade comprising an interface for providing an electrical connection to the STT, whereby the e-mail is transferred from the STT for processing and the processed e-mail is passed to the STT for display, Kauffman does not discuss a separate hardware unit for processing of the e-mail services.

However, the disclosure of Handelman teaches that e-mail data may be transmitted from the CATV interface unit 18 to an external memory unit 38, (Fig. 2; col. 6, lines 24-26). E-mail data then may be retrieved from external memory unit 38 passed through the STT and displayed on the TV receiver, col. 6, lines 38-45. It would have been obvious for one ordinary skill in the art at the time the invention was made to modify Kauffman with the teachings of Handelman, at least for the desirable advantage of making more memory available through the external memory unit.

Thus the amended claimed feature of, 'whereby digital data, including electronic mail is transferred from the STT for processing and the processed electronic mail is passed to the STT

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for display”, reads on Handelman. Handelman teaches passing compressed electronic mail at least to an external memory card, which reads on the claimed ‘processing’.

As for the claimed at least one microprocessor connected to the interface for processing the e-mail to produce processed e-mail, Handelman does not show that the memory card includes a CPU. Nevertheless, Lett discloses a subscriber terminal 40 that includes an expansion card 138 that extends the capability of the subscriber terminal 40 by operating various additional processes, col. 8, lines 54-63. Lett goes on to teach that these expansion cards 138 include a microprocessor, which reads on the claimed subject matter; also see col. 8, lines 55-63.

It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify the combination of Kauffman & Lett with the feature of placing a microprocessor on the expansion card, at least for the desirable advantage of more independent modular systems, as taught by Lett, col. 8, lines 61-63.

Regarding the claimed feature of the ‘microprocessor of the hardware upgrade being capable of communication with the microprocessor of the set top converter’, Lett teaches that the microprocessor 128 and secure microprocessor 136 of the subscriber terminal 40 communicates with the expansion card 138, which includes its own microprocessor and/or memory, via memory bus 141 and secure memory bus 143, respectively; see col. 8, lines 11-63. Thus, the feature reads on the combination of Handelman, which teaches that the expansion card processes

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electronic mail, and Lett, which provides a microprocessor on the expansion card for controlling operation, i.e., processing activity of the expansion card 138.

Considering claims 2 & 17, Handelman discloses that video data may be transmitted to the CATV unit 18 in MPEG format, which reads on digital video; see col. 6, lines 15-21.

Considering claims 4 & 19, the instant claim calls for subscriber input, including textual information that is used to produce the processed e-mail for display. Kauffman clearly discusses that the subscriber is enabled to “send and receive e-mail messages”, which requires textual input, see col. 8, lines 19-30. Also, Handelman discuss that a remote control is used to select an information display channel or non-CATV data display option. Handelman also teaches that the STT may be connected to a keyboard, thereby enabling the input of textual information.

Considering claims 5 & 20, Handelman (col. 1, lines 61-67) discloses interfacing with on-line databases, interactive services and message services and using a telephone modem.

Considering claims 6 & 21, the claimed memory for storing the processed e-mail is met by the external memory unit 38 or internal memory unit 36 of Handelman; see Fig. 2, also see Lett, col. 8, lines 45-65, which teaches that the expansion card 138 includes memory.

Considering claim 16, the claimed method for enhancing the functionality of a STT comprises steps that correspond with subject matter mentioned above in the rejection of claim 1, and is likewise treated.

Considering claim 43, the claimed feature of 'textual interactivity', Handelman teaches that the subscriber may have input to the system using a keyboard 130, which reads on 'textual interactivity', see col. 8, lines 46-50. As for the claimed 'overlay menus', Kauffman discusses the use of an on-screen display, but does not explicitly discuss an overlay screen.

Considering claim 44, Lett teaches that the expansion card 138 extends the capability of the subscriber terminal 40, but does not explicitly state the expansion card may coordinate reception of TV programs and interact with the upstream data transmitter. Nevertheless, one of ordinary skill in the art at the time the invention was made, would have readily recognized the benefit of placing some of the tuning and upstream functionality on an expansion card. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify the combination of Lett to provide additional features such as tuning to the expansion card, at least for the desirable improvement of enabling multiple channels to be tuned concurrently and/or providing redundancy of tuning and upstream hardware.

Considering claim 45, the claimed elements of a hardware upgrade for a STT in a TV program delivery system that correspond with subject matter mentioned above in the rejection of claims 1 & 16, are likewise analyzed. As for the additional claimed 'modem for accessing an

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online service outside of the TV program delivery system and for receiving electronic mail from the online service', Handelman teaches that the modem 119 may provide e-mail services, col. 8, lines 1-26.

As for the additionally claimed, 'memory for storing programming instructions that enable a subscriber to engage in textual interactivity with the processing of the electronic mail', Lett teaches that the expansion card 138 may include "additional program or data memory". Thus the combination of Handelman (which teaches that the external memory 38, at least stores e-mail data, and that using keyboard 130, the subscriber has textual interactivity with the e-mail service) and Lett, reads on the claimed subject matter.

The further claimed, 'interface for providing an electrical connection between the STT and the hardware upgrade, and for transferring the processed electronic mail from the hardware upgrade to the STT for display', is inherent in Handelman.

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Any response to this action should be mailed to:

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or faxed to:

(571) 273-8300, (for formal communications intended for entry)

Or:

(571) 273-7290 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reuben M. Brown M. Brown whose telephone number is (571) 272-7290. The examiner can normally be reached on M-F(8:30-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communications and After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Reuben M. Brown



SCOTT E. BELIVEAU
PRIMARY PATENT EXAMINER

Acty SDE



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